

Excerpt

Search Notes

STN
(HCAPLUS, INSPEC, JARD, USPATALL)
9/21/04

=> d 110 1-7 abs,bib

L10 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2004 ACS on STN
AB The present invention discloses microfluidic modules for making **nanocrystalline** materials in a continuous **flow** process. The microfluidic modules include one or more **flow path** with mixing structures and one or more controlled heat exchangers to process the **nanocrystalline** materials and reagents in the **flow path**. The microfluidic modules can be interconnected to form microfluidic reactors that incorporate one or more process functions such as nucleation, growth, and purification.
AN 2004:740217 HCAPLUS
TI **Microfluidic** chemical **reactor** for the manufacture of chemically produced nanoparticles
IN Swinehart, Philip R.; Pollard, Kimberly; McGee, Christopher
PA Lake Shore Cryotronics Inc., USA
SO PCT Int. Appl., 96 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004076056	A2	20040910	WO 2004-US5942	20040226
	W:	AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI			
	RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRAI	US 2003-449590P	P	20030226		

L10 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2004 ACS on STN
AB A review on (1) application of semiconductor nanoparticles as fluorescent tags of biomols., (2) synthesis of semiconductor nanoparticles and microreactors, (3) industrial preparation of CdSe **nanocrystals** in a micro-**flow**-reactor, and (4) synthesis of CdSe-ZnS composite nanoparticles in a **microfluidic reactor** and their characterization.
AN 2004:282145 HCAPLUS
DN 140:334839
TI Preparation of nanosized fluorescent particle in a microspace
AU Nakamura, Hiroyuki; Maeda, Hideaki
CS Micro-space Chem. Lab., AIST, Tosu, 841-0052, Japan
SO Baioisaiensu to Indasutori (2004), 62(3), 179-180
CODEN: BIDSE6; ISSN: 0914-8981
PB Baioindasutori Kyokai
DT Journal; General Review
LA Japanese

L10 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2004 ACS on STN
AB Cadmium selenide **nanocrystals** are reproducibly synthesized at high-temperature in continuous **flow**, chip-based microfluidic reactors and exhibit size distributions comparable to those for conventional macroscale syntheses. **Nanocrystal** size, probed by fluorescence, is precisely controlled by independently varying the temperature, **flow**

rate, and concentration of precursor solution **flowing** through heated microchannels. These expts. demonstrate the ability to fine-tune phys. properties and test wide ranges of conditions precisely and rapidly inside chip-based microreactors, enabling rational, cost-effective, and environmentally friendly development and production of novel nanostructures.

AN 2003:35689 HCAPLUS

DN 138:94084

TI Size-controlled growth of CdSe **nanocrystals** in microfluidic reactors

AU Chan, Emory M.; Mathies, Richard A.; Alivisatos, A. Paul

CS Department of Chemistry, University of California, Berkeley, CA, 94720, USA

SO Nano Letters (2003), 3(2), 199-201

CODEN: NALEFD; ISSN: 1530-6984

PB American Chemical Society

DT Journal

LA English

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 7 USPATFULL on STN

AB Arrays of **flowable** or fixed particle sets are used in microfluidic systems for performing assays and modifying hydrodynamic **flow**. Also provided are assays utilizing **flowable** or fixed particle sets within a microfluidic system, as well as kits, apparatus and integrated systems comprising arrays and array members.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 2004:126981 USPATFULL

TI Manipulation of microparticles in microfluidic systems

IN Burd Mehta, Tammy, San Jose, CA, UNITED STATES

Kopf-Sill, Anne R., Portola Valley, CA, UNITED STATES

Parce, J. Wallace, Palo Alto, CA, UNITED STATES

Chow, Andrea W., Los Altos, CA, UNITED STATES

Bousse, Luc J., Los Altos, CA, UNITED STATES

Knapp, Michael R., Redwood City, CA, UNITED STATES

Nikiforov, Theo T., San Jose, CA, UNITED STATES

Gallagher, Steve, Palo Alto, CA, UNITED STATES

PA Caliper Technologies Corp., Mountain View, CA (U.S. corporation)

PI US 2004096960 A1 20040520

AI US 2003-606201 A1 20030625 (10)

RLI Continuation of Ser. No. US 2000-510626, filed on 22 Feb 2000, GRANTED, Pat. No. US 6632655

PRAI US 1999-121223P 19990223 (60)

US 1999-127825P 19990405 (60)

US 1999-128643P 19990409 (60)

DT Utility

FS APPLICATION

LREP CALIPER LIFE SCIENCES, INC., 605 FAIRCHILD DRIVE, MOUNTAIN VIEW, CA, 94043-2234

CLMN Number of Claims: 1

ECL Exemplary Claim: 1

DRWN 19 Drawing Page(s)

LN.CNT 4120

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 5 OF 7 USPATFULL on STN

AB A storage device for the storage and retrieval of arbitrary sequences of binary information provides areal densities exceeding terabytes per square centimeter (TB/cm.sup.2) and even petabytes per square centimeter (PB/cm.sup.2) in a 3D configuration. The information is encoded in long strands of biological or non-biological molecules such as artificial DNA, RNA or other synthetic molecules that form a macromolecule. The

strands are written in-situ and, in some cases synthesized in-situ, transported to and from read and write stations and memory locations on the device. The data is read out by detecting individual bases or collection of bases directly from the strand.

AN 2004:1355 USPATFULL
TI Information storage and retrieval device using macromolecules as storage media
IN Mansuripur, Masud, Tucson, AZ, UNITED STATES
Khulbe, Pramod Kumar, Tucson, AZ, UNITED STATES
Perry, Joseph Walter, Tucson, AZ, UNITED STATES
Kuebler, Stephen Michael, Tucson, AZ, UNITED STATES
Erwin, James Kevin, Tucson, AZ, UNITED STATES
PA The Arizona Board of Regents on Behalf of the University of Arizona (U.S. corporation)
PI US 2004001371 A1 20040101
AI US 2003-600935 A1 20030620 (10)
PRAI US 2002-391639P 20020626 (60)
DT Utility
FS APPLICATION
LREP Norman P. Soloway, HAYES SOLOWAY P.C., 130 W. Cushing Street, Tucson, AZ, 85701
CLMN Number of Claims: 63
ECL Exemplary Claim: 1
DRWN 21 Drawing Page(s)
LN.CNT 1452

L10 ANSWER 6 OF 7 USPATFULL on STN

AB Arrays of **flowable** or fixed particle sets are used in microfluidic systems for performing assays and modifying hydrodynamic **flow**. Also provided are assays utilizing **flowable** or fixed particle sets within a microfluidic system, as well as kits, apparatus and integrated systems comprising arrays and array members.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 2003:273357 USPATFULL
TI Manipulation of microparticles in microfluidic systems
IN Mehta, Tammy Burd, San Jose, CA, United States
Kopf-Sill, Anne R., Portola Valley, CA, United States
Parce, J. Wallace, Palo Alto, CA, United States
Chow, Andrea W., Los Altos, CA, United States
Bousse, Luc J., Los Altos, CA, United States
Knapp, Michael R., Redwood City, CA, United States
Nikiforov, Theo T., San Jose, CA, United States
Gallagher, Steve, Palo Alto, CA, United States
PA Caliper Technologies Corp., Mountain View, CA, United States (U.S. corporation)
PI US 6632655 B1 20031014
AI US 2000-510626 20000222 (9)
PRAI US 1999-128643P 19990409 (60)
US 1999-127825P 19990405 (60)
US 1999-121223P 19990223 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Ponnaluri, Padmashri; Assistant Examiner: Tran, My Chau T
LREP Quine Intellectual Property Law Group, P.C., Murphy, Matthew B., McKenna, Donald R.
CLMN Number of Claims: 71
ECL Exemplary Claim: 1
DRWN 28 Drawing Figure(s); 19 Drawing Page(s)
LN.CNT 4515
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 7 OF 7 USPATFULL on STN

AB The invention is directed to a method and device for routing, mixing, or reacting droplets or liquid microstreams along the surface of a flat substrate. The **flow** of liquid microstreams or microdroplets along designated pathways is confined by chemical surface patterning. Individually addressable heating elements, which are embedded in the substrate, can be used to generate **flow** via thermocapillary effects or to trigger or quench chemical reactions. The open architecture allows the liquid to remain in constant contact with the ambient atmosphere. The device can be used for **microfluidic** applications or as a surface **reactor** or biosensor, among other applications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 2002:272567 USPATFULL

TI Method and device for controlling liquid **flow** on the surface of a microfluidic chip

IN Troian, Sandra M., Princeton, NJ, UNITED STATES
Darhuber, Anton A., Princeton, NJ, UNITED STATES
Wagner, Sigurd, Princeton, NJ, UNITED STATES

PI US 2002150683 A1 20021017

AI US 2001-16294 A1 20011102 (10)

PRAI US 2000-245119P 20001102 (60)

US 2000-248860P 20001109 (60)

US 2000-248861P 20001109 (60)

DT Utility

FS APPLICATION

LREP Mathews, Collins, Shepherd & Gould, P.A., Suite 306, 100 Thanet Circle,
Princeton, NJ, 08540

CLMN Number of Claims: 101

ECL Exemplary Claim: 1

DRWN 5 Drawing Page(s)

LN.CNT 1214

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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(FILE 'HOME' ENTERED AT 09:56:53 ON 21 SEP 2004)

FILE 'HCAPLUS, INSPEC, JAPIO, USPATFULL, USPAT2' ENTERED AT 09:58:11 ON
21 SEP 2004

L1 43655 S (NANOCRYSTAL?)
L2 260 S (MICROFLUID?) (8A) (MODULE OR REACTOR)
L3 3614855 S (FLOW? OR FLOW? (4A) PATH#)
L4 1447181 S (CHANNEL#)
L5 87915 S (FLUID?) (6A) (INLET#)
L6 77309 S (FLUID?) (6A) (OUTLET#)
L7 4803 S (INDEPENDENT? (4A) CONTROL? OR INDEPENDENT? (4A) VARY? OR INDEPEN
L8 2584 S (REGENT#)
L9 7 S L1 AND L2
L10 7 S L1 AND L2 AND L3
L11 0 S L1 AND L2 AND L3 AND L5 AND L6
L12 0 S L1 AND L2 AND L3 AND L7

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